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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/628,259	07/29/2003	Jih-Ru Hwu	21927-003001 / PB920114	5436

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FISH & RICHARDSON PC  
P.O. BOX 1022  
MINNEAPOLIS, MN 55440-1022

EXAMINER
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PAK, JOHN D

ART UNIT	PAPER NUMBER
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1616

SHORTENED STATUTORY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE
31 DAYS	04/03/2007	PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

**Office Action Summary**

Application No.

10/628,259

Applicant(s)

HWU ET AL.

Examiner

JOHN PAK

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 1 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 08 January 2007.
- 2a) ☐ This action is **FINAL**.                      2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 15, 17, 18 and 23-37 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☐ Claim(s) \_\_\_\_\_ is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☒ Claim(s) 15, 17, 18 and 23-37 are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)                                | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                       | 5) <input type="checkbox"/> Notice of Informal Patent Application                       |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

Claims 15, 17-18 and 23-37 are pending in this application.

This Office action is in response to applicant's amendments of 1/8/2007.

Applicant has chosen to amend and add new claims to highlight different metals in component (A). Applicant's amendments highlight as well the distinctness of the various inventions and undue burden involved in searching for the various distinct features. The previous restriction requirement is withdrawn and the following new restriction requirement is set forth below. In this regard, it is noted that a restriction requirement may be made "at any time before final action," as soon as the need for a proper requirement develops. MPEP 811. A second requirement may be made even though there was a prior requirement with which applicant complied. MPEP 811.02.

Restriction to one of the following inventions is required under 35 U.S.C. 121:

- I. Claims 15, 17-18, 23-37, drawn to an anti-bacteria, anti-virus, and anti-fungus composition, which includes a Ni, Co, or Pd compound in component (A), classified in class 424, subclass 646.
- II. Claims 15, 17-18, 23-37, drawn to an anti-bacteria, anti-virus, and anti-fungus composition, which includes an Mn compound in component (A), classified in class 424, subclass 639.
- III. Claims 15, 17-18, 23-25 and 35-37, drawn to an anti-bacteria, anti-virus, and anti-fungus composition, which includes a Cr compound in component (A), classified in class 424, subclasses 655-666.
- IV. Claims 15, 17-18, 23-25, drawn to an anti-bacteria, anti-virus, and anti-fungus composition, which includes a Ca compound in component (A),

classified in class 424, subclasses 682, 686-688, 693, 696, as well as various subclasses in class 514.

- V. Claims 15, 17-18, 23-37, drawn to an anti-bacteria, anti-virus, and anti-fungus composition, which includes a Fe compound in component (A), classified in class 424, subclass 646-648.
- VI. Claims 15, 17-18, 23-25, drawn to an anti-bacteria, anti-virus, and anti-fungus composition, which includes a Ti compound in component (A), classified in class 424, subclass 617.
- VII. Claim 15, 17-18, 23-25, drawn to an anti-bacteria, anti-virus, and anti-fungus composition, which includes an Al compound in component (A), classified in class 424, subclasses 682, 685-686.
- VIII. Claim 15, 17-18, 23-25, drawn to an anti-bacteria, anti-virus, and anti-fungus composition, which includes an Sb compound in component (A), classified in class 424, subclass 651.
- IX. Claim 15, 17-18, 23-25, drawn to an anti-bacteria, anti-virus, and anti-fungus composition, which includes an Sn compound in component (A), classified in class 424, subclass 650.
- X. Claim 15, 17-18, 23-25, drawn to an anti-bacteria, anti-virus, and anti-fungus composition, which includes a Pb compound in component (A), classified in class 424, subclass 652.

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- XI. Claims 15, 17-18, 23-25, drawn to an anti-bacteria, anti-virus, and anti-fungus composition, which includes a Pt compound in component (A), classified in class 424, subclass 649.
- XII. Claims 15, 17-18, 23-25, drawn to an anti-bacteria, anti-virus, and anti-fungus composition, which includes an Os, Ru, Rh or Ir compound in component (A), classified in class 424, subclass 617.
- XIII. Claims 15, 17-18, 23-25, drawn to an anti-bacteria, anti-virus, and anti-fungus composition, which includes a Cd compound in component (A), classified in class 424, subclass 654.
- XIV. Claims 23, 29-31, drawn to an anti-bacteria, anti-virus, and anti-fungus composition, which includes a Cu compound in component (A), classified in class 424, subclasses 630-632, 634, 637-638.
- XV. Claim 24, drawn to an anti-bacteria, anti-virus, and anti-fungus composition, which includes a Mg compound in component (A), classified in class 424, subclasses 682, 686, 697.
- XVI. Claim 25, drawn to an anti-bacteria, anti-virus, and anti-fungus composition, which includes a Zn compound in component (A), classified in class 424, subclass 641.

Applicant is further required to elect for examination purposes a single disclosed species of component (A), such as for example Ni fluoride if group I were elected.

The distinctness of the 16 inventions as set forth above is evidenced by the use of chemically distinct metal elements and compounds thereof. Distinctness is multiplied

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by a factor of three thereafter because the claimed invention is directed to a mixture of the three ingredient categories A, B and C.

There would be undue burden in having to search and examine additional invention groups. An exhaustive search for applicant's invention in its entirety, with its multiple distinct inventive features and various permutations due to incorporation of parts (B) and (C), would take several weeks, if not more. This Examiner is given less than 14 hours to search and examine this application, from start to finish (abandonment, allowance, appeal). It would be an undue burden on this Examiner to have to search and examine more than one distinct invention under the circumstances of this application. As already evidenced by the previously cited U.S. Patent 6,664,289 to Hansen, the prior art references are species-specific, precisely because substantially different species or mixtures thereof encompass separate subjects for inventive effort. U.S. Patent 6,753,016 is additional evidence of inventive subject matter directed only to one invention group, Fe compounds. Each of the distinct inventions requires searching in places where no pertinent prior art to the other inventions may exist. Even where there is some overlap as to U.S. classification subclasses, the search for one invention group in the non-patent literature search field would require searching in places where no pertinent prior art to the other inventions may be found. With so many structurally distinct compounds, which cannot be searched or examined together, the search and examination of additional inventive subject matter would rise to a level that would be undue.

Because these inventions are independent or distinct for the reasons given above and have acquired a separate status in the art in view of their different classification and divergent subject matter, restriction for examination purposes as indicated is proper.

The election of an invention or species may be made with or without traverse. To reserve a right to petition, the election must be made with traverse. If the reply does not distinctly and specifically point out supposed errors in the restriction requirement, the election shall be treated as an election without traverse.

Should applicant traverse on the ground that the inventions or species are not patentably distinct, applicant should submit evidence or identify such evidence now of record showing the inventions or species to be obvious variants or clearly admit on the record that this is the case. In either instance, if the examiner finds one of the inventions unpatentable over the prior art, the evidence or admission may be used in a rejection under 35 U.S.C.103(a) of the other invention.

Applicant is advised that the reply to this requirement to be complete must include (i) an election of a species or invention to be examined even though the requirement be traversed (37 CFR 1.143) and (ii) identification of the claims encompassing the elected invention.

Applicant is reminded that upon the cancellation of claims to a non-elected invention, the inventorship must be amended in compliance with 37 CFR 1.48(b) if one or more of the currently named inventors is no longer an inventor of at least one claim

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remaining in the application. Any amendment of inventorship must be accompanied by a request under 37 CFR 1.48(b) and by the fee required under 37 CFR 1.17(i).

Any inquiry concerning this communication or earlier communications from the Examiner should be directed to JOHN PAK whose telephone number is **(571)272-0620**.

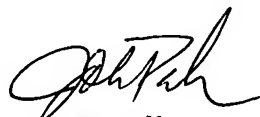
The Examiner can normally be reached on Monday to Friday from 8 AM to 4:30 PM.

If attempts to reach the Examiner by telephone are unsuccessful, the Examiner's SPE, Johann Richter, can be reached on **(571)272-0646**.

The fax phone number for the organization where this application or proceeding is assigned is **(571)273-8300**.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (571)272-1600.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

  
JOHN PAK  
PRIMARY EXAMINER  
OF ART 1600